



### PATENT APPLICATION

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE.

In re application of

Docket No: Q65387

Roberto VALTOLINA, et al.

Appln. No.: 09/902,781

Group Art Unit: 2664

Confirmation No.: 7736

Examiner: Andrew C. C. LEE

Filed: July 12, 2001

For:

METHOD AND DEVICE FOR CARRIER RECOVERY IN OFDM SYSTEMS

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, along with a copy of the corresponding European Search Report dated May 18, 2005, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, Notice of Allowance, or an action that otherwise closes

INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 09/902,781

Attorney Docket No. Q65387

prosecution in the application (whichever is earlier), and therefore Applicant is filing

concurrently herewith a Statement Under 37 C.F.R. § 1.97(e). No fee under 37 C.F.R. § 1.17(p)

is required.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Hyndman Registration No. 39,234

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 21, 2005

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& B/1 10		•	Application Number	09/902,781
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	7		First Named Inventor	Roberto VALTOLINA
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U.S. PATENT DOCUMENTS							
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		Number	Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		
		US					
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FOREIGN PATENT DOCUMENTS							
Examiner Cite Initials* No.1	Cite	Foreign Patent Document			Publication Date	Name of Patentee or	
	Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation <sup>6</sup>	
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Examiner Cite Initials* No. <sup>1</sup>		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.			
		SOMMER D ET AL: "Coherent OFDM transmission at 60 GHz" Vehicular Technology Conference, 1999. VTC 1999 - Fall. IEEE VTS 50 <sup>th</sup> Amsterdam, Netherlands, 19-22 Sept. 1999, Piscataway, NJ, USA, IEEE, US,, vol. 3, September 19, 1999, pages 1545-1549, XP010353233.	Yes		
		LUISE ET AL: "Carrier frequency acquisition and tracking for OFDM systems" IEEE Transactions on Communications, IEEE Inc. New York, US, vol. 44, no. 11, November 1996, pages 1590-1598, XP002081217.	Yes		
		WARNER W D ET AL: "OFDM/FM Frame Synchronization for Mobile Radio Data Communication" IEEE Transactions on Vehicular Technology, IEEE Inc. New York, US, vol. 42, no. 3, August 1, 1993, pages 302-313, XP000394042.	Yes		
		LUISE M ET AL: "Carrier frequency recovery in all-digital modems for burst-mode transmissions" IEEE Transactions on Communications, IEEE Inc. New York, US, vol. 43, no. 2/4, part 2, February 1, 1995, pages 1169-1178, XP000502606.	Yes		

Evaminar Cianatura	Date Considered	ł	
Examiner Signature	Date Considered		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.



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STATEMENT UNDER 37 C.F.R. § 1.97(e)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of said Information Disclosure Statement.

Respectfully submitted,

Hyndman Registration No. 39,234

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WASHINGTON OFFICE 23373 CUSTOMER NUMBER

Date: June 21, 2005